

Chicago Bicycle Count Project

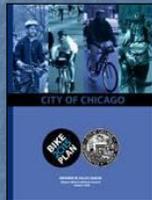
- Project Purpose
- Methodology
- Trial Results
- 2009 Citywide Counts
- Long Term Plans
- Questions

Bicycle and Pedestrian Task Force
 Chicago Metropolitan Agency for Planning

March 17th, 2010

Why Count Bicyclists?

- City of Chicago's *Bike 2015 Plan* (2006)
- Plan goals
 - To Increase bicycle use
 - so that 5 percent of all trips less than five miles are by bicycle
 - To reduce the number of bicyclist injuries
 - by 50 percent from current levels



Bicycle and Pedestrian Task Force
 Chicago Metropolitan Agency for Planning

March 17th, 2010

Why Count Bicyclists?

- *Bike 2015 Plan*
- Chapter 1, Objective 5 – “Help current and potential bicyclists choose safe, convenient routes.”
 - Strategy 5.2 – Collect data to identify popular bikeways and the impact of the *Bike 2015 Plan* strategies. Data needs include bike counts on roads and trails, counts before and after a bikeway is constructed, and surveys to determine what facilities would have the greatest use.

Bicycle and Pedestrian Task Force
 Chicago Metropolitan Agency for Planning

March 17th, 2010

Automated vs. Manual Counts

- Manual Bike Counts
 - Conducted annually until 2003
 - Bicyclist characteristics
 - Peak-hour counts
- Automated Counts
 - 24-hour (or longer) counts
 - Comparable to motor vehicle counts
 - New technology

Bicycle and Pedestrian Task Force
 Chicago Metropolitan Agency for Planning

March 17th, 2010

Eco-Counter

- Tested Eco-Counter's Selective Pneumatic Tubes throughout the summer of 2008



Bicycle and Pedestrian Task Force
 Chicago Metropolitan Agency for Planning

March 17th, 2010

Trial Locations



Existing Bike Lane – Wells Street

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010

Trial Locations



Existing Marked Shared Lane – Lincoln Avenue

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010

Trial Locations



Existing Bus/Bike Lane – Milwaukee Avenue

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010

Trial Locations



Shared Roadway – Orleans Street

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010

Trial Methodology

- Peak hour, 24-hour and 48-hour tests
- Simultaneous manual counts and video
- Standard traffic counting tubes
- Variation in tube length



Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010

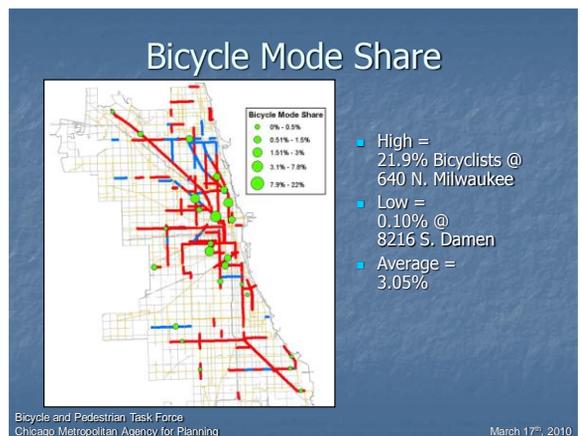
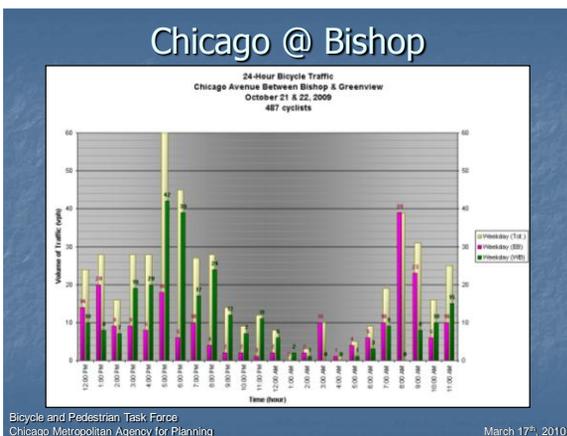
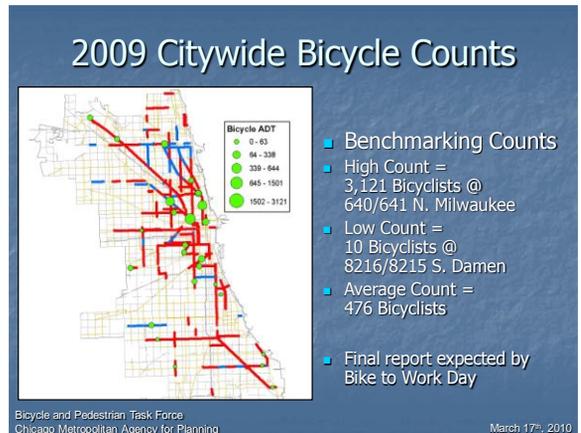
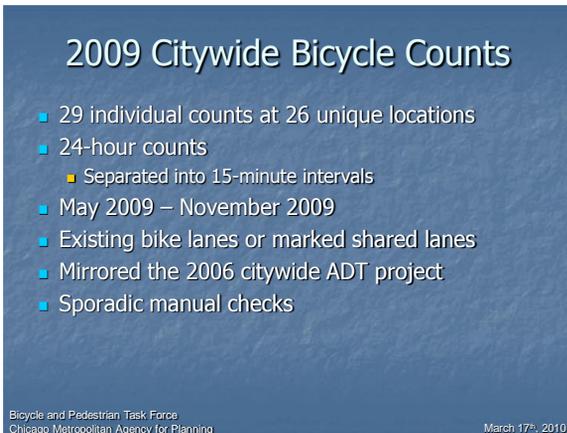
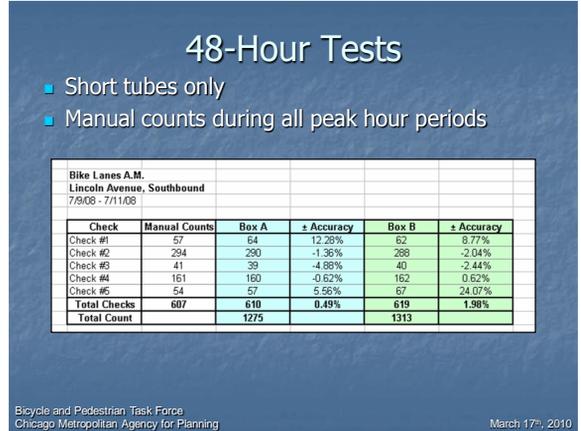
Test Results

- Tube length findings
- Explanation of errors
 - Location
 - Simultaneous crossings

Test #2 - Marked Shared Lanes P.M. 2123 N. Lincoln Ave., Northbound Tuesday, 6/17/2008 Weather: 75 Degrees, Scattered Clouds					
Time	Manual Counts	A		B	
		Short Tubes	± Accuracy	Long Tubes	± Accuracy
4:15 p.m.	15	21	40.00%	22	46.67%
4:30 p.m.	23	19	-17.39%	20	-13.04%
4:45 p.m.	19	18	-5.26%	25	31.58%
5:00 p.m.	25	29	16.00%	34	36.00%
5:15 p.m.	34	35	2.94%	39	14.71%
5:30 p.m.	47	50	6.38%	68	44.68%
5:45 p.m.	49	47	-4.08%	55	12.24%
6:00 p.m.	40	44	10.00%	53	32.50%
Total	252	263	4.37%	316	25.40%

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010



Long Term Plans

- Annual counts at benchmarking locations
- Before and after counts at new bikeway locations
- Annual cordon counts
- Test other Eco-Counter products
 - www.eco-counter.com



Inductive Loop Sensor

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010

Questions?



Mike Amsden, AICP
michael.amsden@tylin.com
mike.amsden@cityofchicago.org

Bicycle and Pedestrian Task Force
Chicago Metropolitan Agency for Planning

March 17th, 2010